

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

MONITORING AND REPORTING PROGRAM NO. R3-2002-0076

FOR

**DISCHARGES FROM AQUACULTURE AND AQUARIUMS
ENROLLED UNDER NPDES GENERAL PERMIT NO. CAG993003**

The following shall constitute the Monitoring and Reporting Program for dischargers authorized to discharge under the NPDES General Permit for Discharges from Aquaculture and Aquariums (General Permit), unless such monitoring and reporting requirements are modified or waived by the Executive Officer. Additional monitoring may be required by the Executive Officer, if needed to adequately measure compliance with the General Permit.

A. INFLUENT MONITORING

Representative influent water samples shall be collected concurrently with effluent samples and analyzed for Total Suspended Solids, pH, Turbidity and Temperature.

B. EFFLUENT MONITORING

A sampling station shall be established where representative samples of the discharge can be obtained before the discharge mixes with the receiving water(s) or any other water flows. Representative samples of the discharge shall be collected and analyzed according to the following schedule:

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Flow	MGD	Metered	Weekly
Settleable Solids	mL/L	Grab	Quarterly
Total Suspended Solids	mg/L	24-hour composite	Quarterly
Net Total Suspended Solids ¹	mg/L	Calculated	Quarterly
Turbidity	NTU	24-hour composite	Quarterly
Net Turbidity ¹	NTU	Calculated	Quarterly
pH	units	Grab	Quarterly
Temperature	°F	Grab	Quarterly
Dissolved Oxygen	mg/L	Grab	Quarterly
BOD ₅	mg/L	24-hour composite	Semi-Annually (June and Dec.)
Grease and Oil	mg/L	24-hour composite	Semi-Annually (June and Dec.)
Ammonia (as N)	mg/L	24-hour composite	Semi-Annually (June and Dec.)
Nitrite (as N)	mg/L	24-hour composite	Semi-Annually (June and Dec.)
Nitrate (as N)	mg/L	24-hour composite	Semi-Annually (June and Dec.)
Total Coliform	MPN/100 mL	Grab	Semi-Annually (June and Dec.)
Fecal Coliform	MPN/100 mL	Grab	Semi-Annually (June and Dec.)
Enterococcus	MPN/100 mL	Grab	Semi-Annually (June and Dec.)

¹ “Net” may be determined by subtracting influent (or “ambient”) concentrations from concurrently sampled effluent concentrations.

C. CHEMICAL USAGE

The following information on drug, disinfectant, and other chemicals added to the discharge, or that might otherwise be present in the discharge, shall be submitted with each monitoring report:

1. The name(s), active ingredient(s), label instructions and restrictions, Material Safety Data Sheets, and amount(s) of all drug(s), disinfectant(s), or other chemical(s) used.
2. The date(s) of application of the drug(s), disinfectant(s), or other chemical(s) used. For drugs, disinfectants, or other chemicals that are used on a routine basis, the frequency of application may be recorded in place of each individual application date.
3. The treatment concentration(s) of the active ingredient(s), duration of treatment, whether the treatment was static or flush, amount in gallons or pounds of the drug, disinfectant, or chemical, and the flow in cubic feet per second (cfs) of the influent to the treatment tank.
4. The quantitative measure of the active ingredient, or the estimated concentration of the active ingredient in the effluent at the point of discharge to the receiving waters, determined by solving for the active ingredient, C, in $\mu\text{g/L}$, where

$$C = (\text{treatment concentration}) \times (\text{flow in treatment area}) \div (\text{flow at the point of discharge})$$

5. The flow in cfs during chemical usage at the point of discharge to the receiving waters.
6. In order to remain authorized to discharge under the General Permit, the discharger shall submit written certification with each monitoring report that substance(s) listed in Table B of the California Ocean Plan (see <http://www.swrcb.ca.gov/plnspols/index.html>) or 40 CFR Section 131.38, (see <http://www.epa.gov/OST/standards/ctrindex.html>) are not added to the waste stream, and that no change has occurred in activities that could cause such substance(s) to be present in the waste stream.

D. WHOLE EFFLUENT TOXICITY TESTING OF OCEAN DISCHARGES

If the Executive Officer's analysis of chemical usage indicates there is reasonable potential for effluent to cause or contribute to an excursion above any applicable water quality standards, the Executive Officer may require the discharger to perform critical life stage toxicity tests to measure the chronic toxicity² (TUc) of effluent. The discharger shall complete the toxicity testing and submit the results as soon as possible, but no later than four months after the Executive Officer directs the discharger to perform the tests.

Chronic toxicity testing shall be in accordance with the list of test species and protocol contained in Table III-1, page 38, of the 2001 California Ocean Plan. A minimum of three test species with approved test protocols shall be used. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring may be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving water. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

If the chronic toxicity of effluent is greater than or equal to 1 TUc, the discharger shall immediately perform a toxicity reduction evaluation (TRE). The TRE shall identify the source of toxicity and take all reasonable steps necessary to reduce the chronic toxicity to below 1 TUc.

² "Chronic Toxicity" is expressed as Toxic Units Chronic (TUc). $TUc = 100 / NOEL$. NOEL is the "No Observed Effect Level." The NOEL is expressed as the maximum percent effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test.

E. EXOTIC SPECIES MONITORING

The Discharger shall immediately report the presence, anywhere within their facility, of any biota listed in California Code of Regulations Title 14, Section 245, or referenced in Part a.8 of the same section, which is not indigenous to the Central Coast Region (exotic species). Any information shall be provided orally to the California Department of Fish and Game (CDFG) within 24 hours from the time the Discharger becomes aware of the circumstances.

The results of all internal exotic species inspections, and inspections conducted by CDFG in accordance with Aquaculture Disease Control Regulations, shall be summarized in each quarterly monitoring report.

If CDFG advises the Executive Officer that exotic species are present in the receiving water as a result of the discharge, the Discharger may be required to perform an assessment of impacts to the aquatic habitat beneficial uses of the receiving water. Such an assessment may include a complete survey of all aquatic life potentially affected by the exotic species. The assessment may require an independent third-party consultant. Any necessary eradication efforts shall be administered by the CDFG.

F. RECEIVING WATER MONITORING

A log shall be kept, and regular (no less frequently than quarterly) visual observations shall be taken of the receiving water(s) conditions at the point of discharge and throughout the reach bounded by monitoring stations RW-1 and RW-2, defined as follows:

Discharges to inland surface waters:

Monitoring Station Name	Location
RW-1	100' upstream from the discharge point
RW-2	100' downstream from the discharge point

Discharges to ocean waters:

Monitoring Station Name	Location
RW-1	100' upcoast of the point of discharge, or beyond if receiving water appears affected.
RW-2	100' downcoast of the point of discharge, or beyond if receiving water appears affected.

Observations shall include, but not be limited to, the presence or absence of the following conditions:

- Floating or suspended matter in the water;
- Discoloration of the water;
- Bottom deposits;
- Visible films, sheens or coatings;
- Fungi, slimes, or objectionable growths;
- Potential nuisance conditions;

Receiving water(s) observations shall be summarized and submitted with each monitoring report. If deemed necessary, the Executive Officer may require the discharger to submit analytical data of receiving water quality and/or photographic documentation of receiving water conditions in lieu of visual observations.

G. SAMPLING AND ANALYSIS

Sampling and analysis shall be in accordance with the following:

1. All sampling, sample preservation, and analysis shall be performed in accordance with the latest edition of 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants". The Executive Officer may specify test methods that are more sensitive than those specified in 40 CFR Part 136.
2. Samples shall be representative of normal facility operations. Periodic samples shall be taken at a time that is representative of that period's normal facility operation. For example, where weekly samples are required, samples shall be collected on a day that is representative of that week.
3. Periodic samples shall be taken at regular intervals. For example, where quarterly samples are required, samples shall be collected on a representative day of March, June, September, and December of each year.
4. Where annual samples are required, samples shall be collected on a representative day of December of each year.
5. All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health, or at a laboratory approved by the Executive Officer.
6. All analytical data shall be reported with method detection limits (MDLs) and with identification of either practical quantitation levels (PQLs) or limits of quantitation (LOQs).
7. All monitoring instruments and devices used by the discharger to fulfill this Monitoring and Reporting Program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

H. REPORTING

Reporting of monitoring data shall be in accordance with the following:

1. Quarterly monitoring reports shall be submitted **by the 30th day of January, April, July and October** for the preceding calendar quarter.
2. Annual reports shall be submitted **by January 30** of each year. The annual report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The report shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharge into full compliance. The report shall restate, for the record, the date when the discharger's Best Management Practices Plan was last updated and the name(s) of the laboratory used by the discharger to monitor compliance with the General Permit.
3. If the Discharger monitors any pollutant more frequently than is required by this monitoring program, the results of such monitoring shall be included in the monitoring reports.
4. Monitoring data shall be arranged in tabular form so that the date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to clearly illustrate whether the discharge complies with effluent limitations.
5. All monitoring reports shall be signed and certified in accordance with Section H.12 and 13 of the General Permit.
6. The Discharger shall deliver a copy of each monitoring report in the appropriate format to following address:

Prior to January 1, 2003:

California Regional Water Quality Control Board
Central Coast Region
81 Higuera Street, Suite 200
San Luis Obispo, CA 93401

After January 1, 2003:

California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

- 7. The Discharger shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or by the request of the Executive Officer. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling, and/or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used;
 - f. All sampling and analytical results;
 - g. All monitoring equipment calibration and maintenance records.

- 8. The Discharger shall immediately report any significant organism mortality or any non-compliance potentially endangering public health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written report shall also be submitted to the Executive Officer within five (5) days of the time the Discharger becomes aware of the circumstances. The written report shall contain (1) a description of the non-compliance or organism mortality and its cause; (2) the period of non-compliance or organism mortality, including dates and times, and if the non-compliance or organism mortality has not been corrected, the anticipated time it is expected to continue; and (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance or organism mortality.

- 9. The Discharger shall report all instances of non-compliance not reported under Reporting Provision No. 8 at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Provision No.8.

ORDERED BY: _____
Executive Officer

DATE: _____